Good Work Practice

Wautoma Wildland Fire

October 23, 2007 2007-RL-HNF-0039 Tracking No: 597

Summary: After the June 2000 fire left the Hanford Site, one Benton City resident was burned and subsequently died, eleven Benton City homes were destroyed and 160,000 acres (~250 square miles) of land were consumed.

On August 16, 2007, at 1:00 P.M., the Hanford Fire Department (HFD) responded to investigate a column of smoke near the Hanford reservation. Because of weather conditions the fire had the potential to threaten government property. What followed



was an almost picture perfect response to a significant wildland fire. The response by the HFD and other mutual aid partners was based upon the lessons learned and implemented from a similar fire which occurred in June 2000. However, the outcome this time was significantly different. No one was injured, no buildings were destroyed, and the fire was contained to about 65,000 acres.

Discussion: The HFD responded to a column of smoke near the Hanford site. A U.S. Fish and Wildlife Service (USFWS) representative and the HFD quickly determined the fire posed a major threat to USFWS and Department of Energy (DOE) property. This decision triggered an immediate response by USFWS resources and the HFD to battle the flames and to request assistance from mutual aid partners. This interagency cooperation created the conditions necessary to place valuable resources, equipment and personnel into action to mitigate the fire and prevent a recurrence of problems seen in the 2000 fire.

New and different strategies and tactics were employed to attack this fire. This was implemented by the use of a wildfire management plan. Backfires were created to remove fuel from the fire's path, bulldozers created wider fire breaks, and specialized off-road fire-fighting equipment were used to battle the flames. The fire was declared contained on August 18, 2007 at 6:00 P.M.

Analysis: While there were many actions taken to control the fire as fast as it was achieved, there were four key components - based upon previous lessons learned which created the conditions for this successful operation. These were: 1) the development and implementation of interagency agreements, 2) the acquisition and use of specialized fire-fighting equipment, 3) creation of the wildfire management plan, and 4) training personnel in wildfire-fighting techniques.

Interagency agreements established the roles and responsibilities, created the appropriate

memoranda of understanding, and defined the protocols essential to effective communication, coordination, and leadership between all parties. This allowed the appropriate decisions to be made in a timely manner which allowed resources to be allocated rapidly.

Specialized fire-fighting equipment included the use of six pumper-tankers built to travel across sandy and rough ground without getting stuck. Each wheel has an independent suspension, as well as, self-deflating tires that widen their footprint in the sand for better

traction under all conditions.

Additionally, four smaller grass trucks had their tires replaced with extra wide tires that perform exceptionally well in the sandy soil native to the area. Two all-terrain vehicles were also purchased and outfitted with drip torches that can throw a flame up to ten feet to quickly create backfires. Except in some inaccessible areas, the ATVs were used with bulldozers to burn vegetation in wide paths to leave no fuel for an approaching wildfire. Each ATV does the work of four or five firefighters while improving safety as well.



While a wildfire management plan was in place in 2000, it was improved after that fire to provide more information, improved plans, and effectively communicate the tactics to be used for wildfires. The improved wildfire management plan also contains the concepts and techniques the HFD now uses to suppress wildfires. This includes the development and maintenance of defensible fire breaks along state highways and roads running through the Hanford Site and the Arid Lands Ecology Reserve, various wildfire fighting scenarios, and available mapping resources for emergency response information used to effectively fight the fire, provide Patrol response, as well as providing understandable information to the public.

The final component was specialized training for HFD personnel. Firefighters now participate in the annual prescribed burning activities to acquire experience with wildfire fuel and learn its characteristics. Two firefighters were sent to intensive training on the use of ATVs to perform burn-out operations. These personnel now train the rest of the HFD personnel in this vital technique. Additionally, all HFD personnel are encouraged to increase the number of certifications in the various levels of incident command. This training and qualification process has continued to progress since the 2000 fire and has significantly matured since that time.

Recommended Actions: None

Cost Savings/Avoidance: Not evaluated, but can be significant depending upon the government facilities, as well as public and private properties in the areas involved.

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References: Hanford Fire Department Incident #: 2007-0677